

A new species of *Hyphoderma* (Basidiomycetes) from India

G.S. DHINGRA, AVNEET P. SINGH* & NISHI SINGLA

dhingragurpaul@gmail.com

Department of Botany, Punjabi University Patiala 147 002

*Department of Biology, S D College Barnala 148 101

Abstract – A new corticioid species, *Hyphoderma singularibasidium*, is described from Dalhausie hills in Himachal Pradesh.

Key words – Chamba, peculiar basidial outgrowth

During the fungal forays conducted in the Banikhet area of Dalhausie hills in district Chamba of Himachal Pradesh, India, Dhingra & Singla made a collection on the underside of a decayed gymnospermous log. After detailed macroscopic and microscopic comparisons with descriptions of known species of genus *Hyphoderma* (Eriksson & Ryvardeen 1975, Rattan 1977, Dhingra 1989) we found it to belong to this genus but representing a species of its own. Typical characters of the genus are large sized, clavate, somewhat constricted, 4-spored basidia and ellipsoid basidiospores with oily contents. However, wide- and short-celled subhymenial hyphae, basidia with a peculiar outgrowth arising from the middle of the basidium, and broadly ellipsoid basidiospores suggest that the collection represents a new species. A sample of the basidiocarp was sent to Prof. Nils Hallenberg, University of Göteborg, Sweden, who also supported the concept of a new species in genus *Hyphoderma*.

Hyphoderma singularibasidium Dhingra, Avneet P. Singh & Singla, sp. nov.

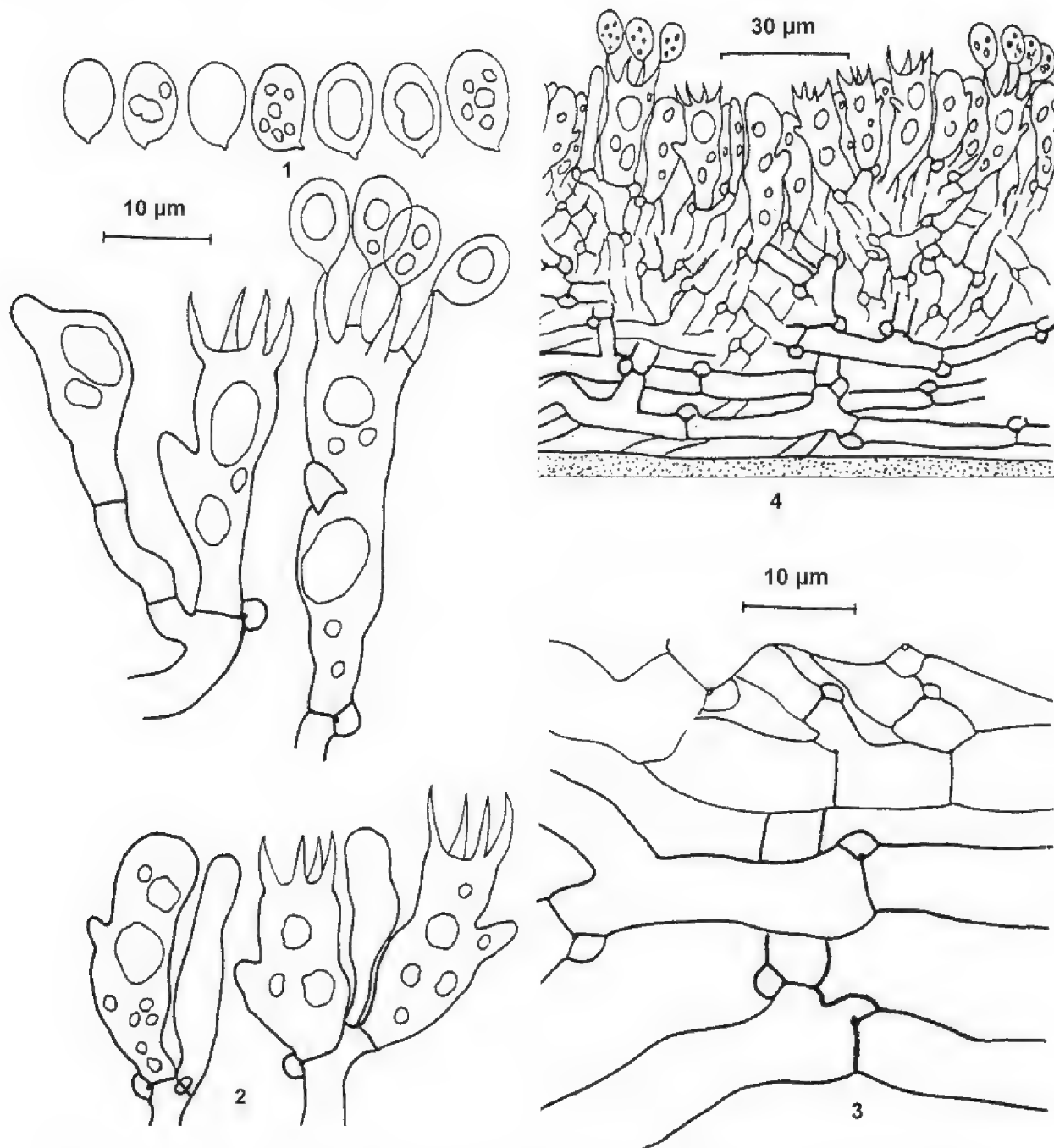
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FIGS 1–5

Basidiocarpi resupinati, laxe adnati, exilies, usque ad 120 µm crassa; superficies hymenialis rugulosa, minute farinacea, ravidopalba-flavidoalba; systema hyphale monomiticum; hyphae usque ad 8 µm latas, tenuitunicataepaulo crassitunicatae, nodoso septatae; basidia 17–35 × 7.0–9.1 µm, clavata-subclavata, colligata, cum processu peculiari medioenato, 4-sterigmata, ad basin fibuligera; basidiospori 7.4–9.1 × 4.5–5.7 µm, late ellipsoidei, laeves, tenuitunicati.

Holotypus: Himachal Pradesh: Chamba, Banikhet, istorsum Surkhigala, in lingo putrido *Cedri deodarae*, Nishi 1397 (PUN) September 23, 1989.

ETYMOLOGY: On the basis of a peculiar lateral outgrowth on basidia.



FIGS 1–4. Microscopic structures from basidiocarp of *Hyphoderma singularibasidium*.
1. basidiospores; 2. basidia; 3. generative hyphae; 4. vertical section of the basidiocarp.

Basidiocarps resupinate, loosely adnate, thin, up to 120 µm thick in section; hymenial surface rough, farinaceous under the lens, grayish white to yellowish white; margins indeterminately thinning out. Hyphal system monomitic; generative hyphae up to 8 µm wide, thin- to somewhat thick-walled, clamped; basal hyphae running parallel to the substrate, less branched, with large cells; subhymenial hyphae much branched, branches arising from the clamps. Basidia 17–35 × 7.0–9.1 µm, clavate to subclavate but constricted in the middle, thin-walled, with a peculiar unilateral outgrowth arising from the middle of the basidium, 4-sterigmate, with a basal clamp, with oily contents; sterigmata up

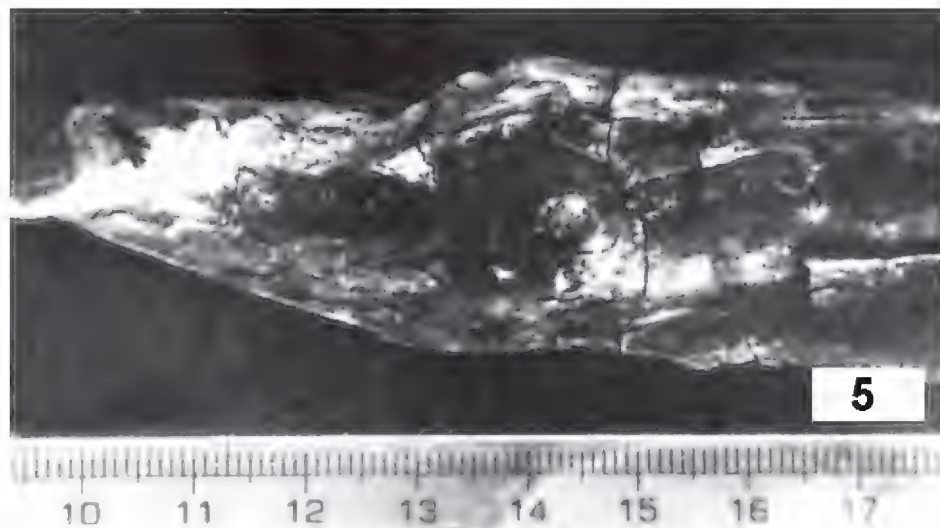


FIG. 5. *Hyphoderma singularibasidium* basidiocarp showing hymenial surface.

to 7.4 μm long. Basidiospores 7.4–9.1 $\times$ 4.5–5.7 μm , broadly ellipsoid, thin- to somewhat thick-walled, smooth, inamyloid, acyanophilous, with a large oil drop or many smaller oil droplets.

The lateral outgrowth from the middle of basidium, pointing in apical direction is a unique character among corticoid *Basidiomycetes*, not reported earlier.

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